NAS Motherboard
User Manual

CPU fan power supply socket

CPU cooling copper spacer

Small 4Pin power supply

System fan power supply socket M.2

SO-DIMM DRR5 memory slot

JMB585 (SATA expansion chip)

24Pin power socket

NVMe x2

SATA3.0 socket (the first one is native)
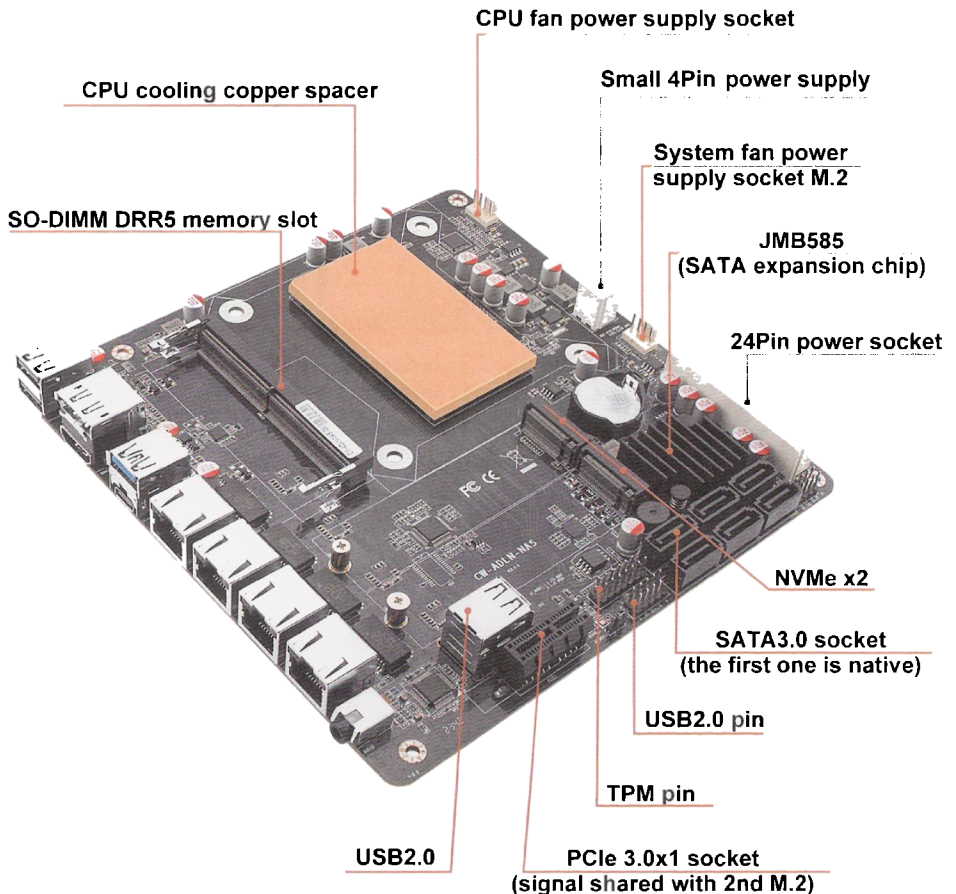
USB2.0 pin
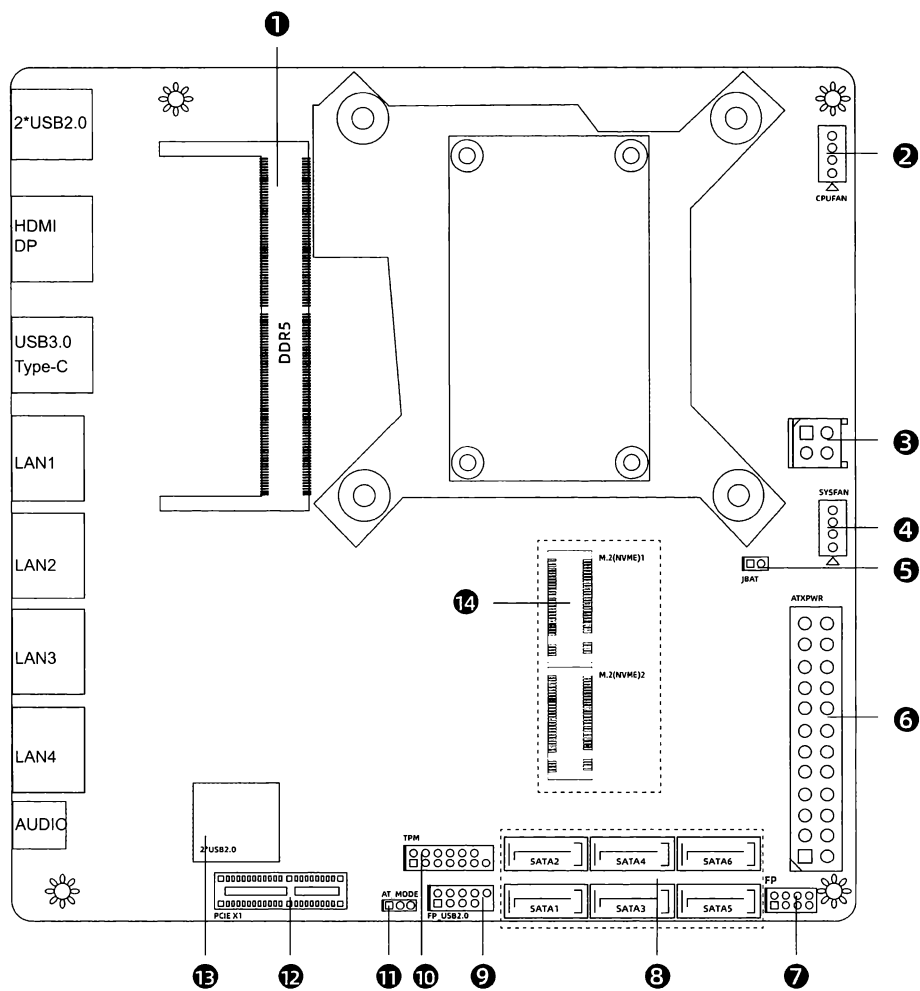
TPM pin

USB2.0

PCIe 3.0x1 socket (signal shared with 2nd M.2)

There may be differences in products produced in different batches, please refer to the actual received goods

Part 1 Product Introduction

1.1 Mainboard Layout

Motherboard Layout Interface Description		
1	DDR5	4800MT/s memory slot, supports up to 32GB
2	CPU FAN	CPU heat dissipation fan port
3	ATX 12V	ATX 4PIN power supply port
4	SYS FAN	System fan interface
5	JBAT	JBAT
6	ATX PWR	ATX 24PIN power supply interface
7	FP	Switch
8	6*SATA	SSD storage, SATA3.0 interface
9	FP_USB2.0	2*USB2.0 (pin arrangement)
10	TPM	Encryption module
11	AT_MODE	Jumper cap for automatic power-on
12	PCIE	PCIE X1 slot
13	2*USB2.0	2*USB2.0 ports on the board
14	2*M.2	SSD storage, support for NVMe protocol

1.2 I/O Interface

❶ 2*USB   ❷ HDMI   ❸ DP   ❹ Type-C

❺ USB3.0   ❻ 4*2.5G i226 network port   ❼ Audio interface
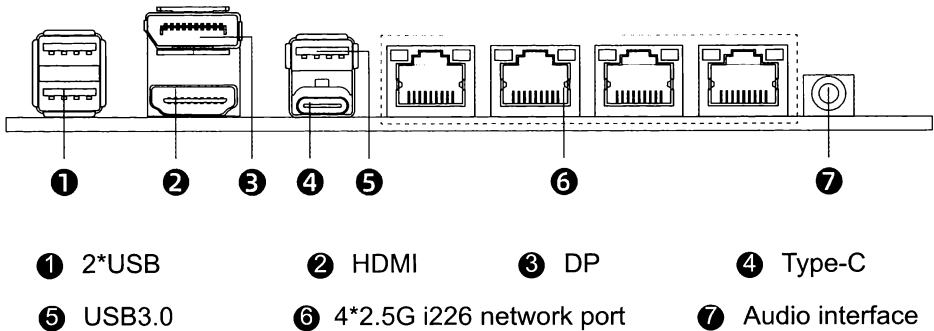
Part 2 Installation

2.1 Tips for Safe Use

1. Please read the product manual carefully before using this product;

2. For boards that are not ready to be installed, they should be stored in anti-static protective bags;

3. Before taking out the board from the anti-static protective bag, place your hands on a grounded metal object for a while (for example, 10 seconds) to release static electricity from your body and hands;

4. When handling the board, wear electrostatic protective gloves and try to only touch the edge of it;

5. In order to avoid electric shock to the human body or damage to the product, the power must be turned off before removing or recon figuring the board;

6. Before moving the board or the whole machine, the power must be turned off;

7. For a complete machine, when adding or removing a mother-board, be sure to turn off the power first;

8. Before you need to connect or remove any equipment, be sure to turn off the AC power first;

9. In order to avoid unnecessary damage to the product caused by frequent switching on and off, after turning off the power, wait at least 30 seconds before turning it on.

2.2 Jumper Setting

How to identify jumpers and the first pin of the interface:

1. Observe the text markings on the plug and socket next to the connector, which will be marked with "1" or bold lines, △, or □ symbols;

2. Look at the solder pads on the back side, the □ square pad is the first pin.

2.3 JBAT jumper specification

| SHORT (Close) | OPEN | OPEN |
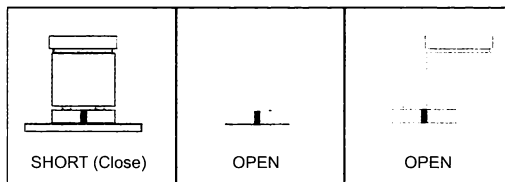
The default pin has no jumper cap, and the state is Open (open circuit state)
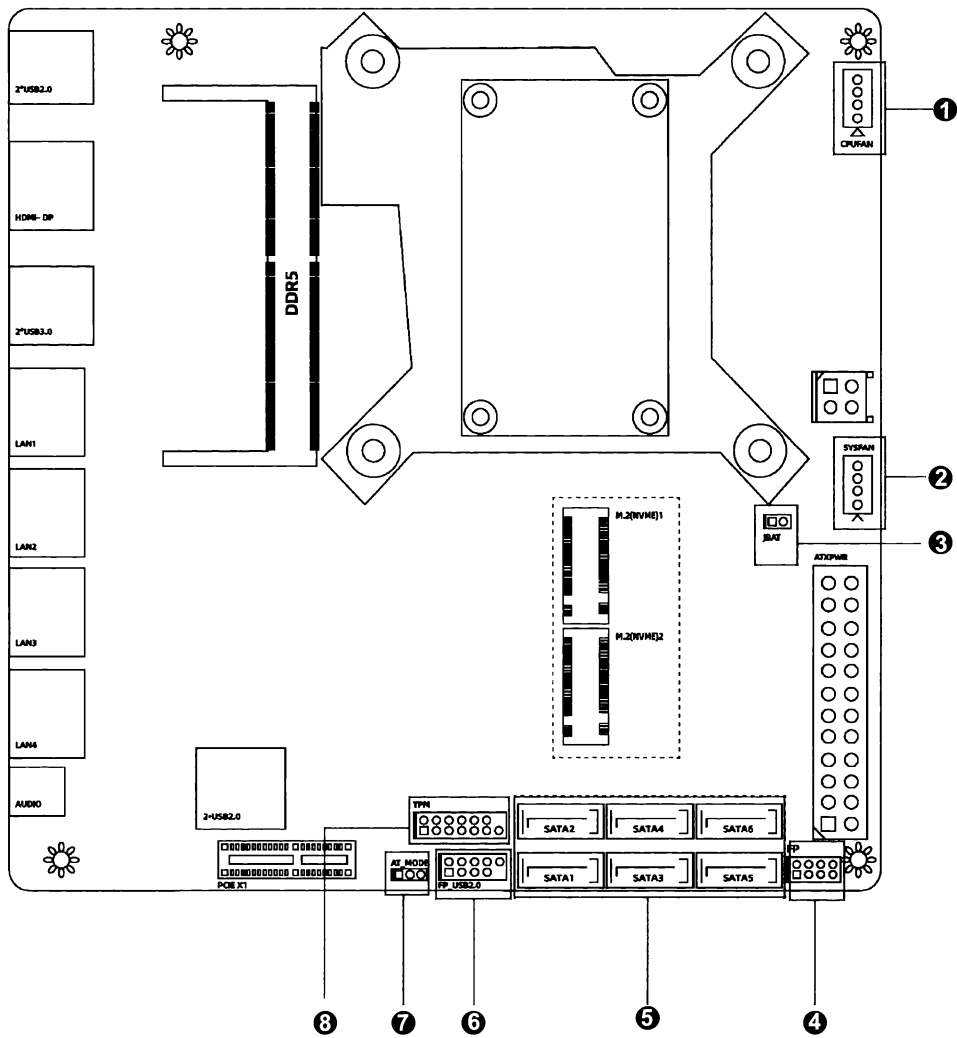This state is normal mode

If you need to clear COMS, use a jumper cap to connect JBAT pins 1-2 together
This state is Close (short circuit state)
In this state, COMS setting data will be cleared.

2.4 Each Pin definition

1.CPU_FAN   4Pin

Pin Position Chart	PIN	Definition	PIN	Definition
	1	GND	2	+12V
	3	DET	4	PWM

2.SYS_FAN   4Pin

Pin Position Chart	PIN	Definition	PIN	Definition
	1	GND	2	+12V
	3	DET	4	PWM
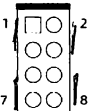
3.JBAT   2Pin

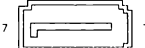| Pin Position Chart	Setting	JBAT
	1-2 open circuit	Normal working state
	1-2 short circuits	Clear CMOS content and restore all BIOS settings to factory settings

4. FP   8Pin

The motherboard provides 1 front panel interface (F_PANEL)
The 8pin header includes power on, reset, hard disk indicator, power indicator, allowing users to connect the system's front panel switch functions.

Pin Position Chart	PIN	Definition	PIN	Definition
	1	HDD_LED+	2	PWR_LED+
	3	HDD_LED-	4	PWR_LED-
	5	RESET_BTN#	6	PWR_BTN#
	7	GND	8	GND

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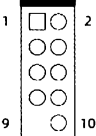
5.SATA3.0   7Pin

The motherboard provides 6* 7-Pin SATA interfaces.

SATA 1-6 Socket	PIN	Definition	PIN	Definition
	1	GND	2	SATA_TXP
	3	SATA_TXN	4	GND
	5	SATA_RXN	6	SATA_RXP
	7	GND	8	

6.FP_USB2.0   9Pin
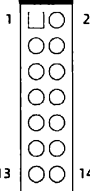
The motherboard provides front panel interface (F_PANEL)

Pin Position Chart	PIN	Definition	PIN	Definition
	1	VCC	2	VCC
	3	D1-	4	D2-
	5	D1+	6	D2+
	7	GND	8	GND
	9		10	GND

7.AT_MODE   3Pin

Pin Position Chart	PIN	Definition
	Short connect 1-2	ATX mode
	Short connect 2-3	AT mode

8.TPM   14Pin

Pin Position Chart	PIN	Definition	PIN	Definition
	1	SPI_VCC	2	PIRQA_N
	3	PLTRST-	4	SPI_CS2
	5	SPI_CS1	6	SPI_WP1-
	7	SPI_VCC	8	GND
	9	SPI_CS0_1	10	TPM_SCLK
	11	TPM_MISO	12	TPM_MOSI
	13	SPI_HOLD1	14	

Does not boot after power on

1. Please confirm whether the power cable is connected properly
2. Please confirm whether the power supply used meets the power supply requirements of the motherboard
3. Try to re-plug the memory module
4. Try to replace the memory module
5. Try to clear the motherboard CMOS according to the motherboard manual
6. Please confirm whether there is an external card, and whether it is normal after removing the external card

Not displayed after boot

1. Check if the monitor is turned on
2. Check if the power cable is properly connected to the monitor and the system unit
3. Check if the monitor cable is properly connected to the system unit and the monitor
4. Check if the display brightness control is set to dark, and the brightness can be increased through the brightness control. (For more information, refer to the monitor operating instructions)
5. Check if the monitor is in "power saving" mode

BIOS Setup cannot be saved

1. Please confirm whether the CMOS battery voltage is lower than 2.8V. If it is lower than 2.8V, please replace the battery with a new one and reset it to save.
2. The BIOS settings are incorrect. According to the key (DEL) prompted by the boot screen, adjust the time and date in the BIOS Setup.

Prompt unable to find a bootable device

1. Please confirm whether the hard disk power cable and data cable are connected properly
2. Please confirm whether the hard disk is physically damaged
3. Please confirm whether the operating system is installed normally in the hard disk

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Blue screen or crash when entering the system

1. Please check if the memory stick and external card are loose
2. Try to remove the newly installed hardware, uninstall the driver or software
3. Try to replace the memory stick

Slow to enter the operating system

1. Try to use third-party software to check whether the hard disk has bad sectors
2. Please confirm whether the remaining space of the system partition is too small
3. Please confirm whether the CPU cooling fan is running normally

System restarts automatically

1. Please confirm whether the CPU cooling fan is rotating normally
2. Please confirm whether the reset button of the industrial computer is triggered by mistake
3. Please use antivirus software to confirm whether the system is infected with viruses
4. Please confirm whether the memory stick and external card are loose
5. Please confirm whether the load capacity of the power supply used is sufficient. You can try to replace the power supply

Unable to detect USB device

1. Please confirm whether the USB device needs a separate power supply
2. Please confirm whether there is any bad contact of the USB interface
3. Please confirm whether the USB controller is turned on in BIOS Setup

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